

## ABSTRACT

An apparatus and method for analyzing an impurity in a liquid. The apparatus comprises a cell coupled to a light source and a detector. The cell includes a first mirror at a first end of the cell to receive and pass the  
5 light into the cell along a longitudinal axis of the cell, and a second mirror at a second end of the cell to at least partially reflect the light. A liquid supply device projects a stream of the liquid between the first mirror and the second mirror and across the longitudinal axis of the cell. The detector is coupled to the second end of the cell and determines a decay rate of the light within the  
10 cell based on the light passing through the liquid.